The

Geophysical Journal

of the

Royal Astronomical Society

Volume 23

Published for the Royal Astronomical Society by
Blackwell Scientific Publications · Oxford and Edinburgh

AUTHOR INDEX

PAGE

Basham, P. W., A new magnitude formula for short period continental Rayleigh waves 255
Blamey, C., Marshall, P. D. & Inston, H. H., Optimization of filter bandwidth in spectral analysis of wavetrains 243
Block, B., Dratler, J., Farrell, W. E. & Gilbert, F., High-Q overtone modes of the Earth 399
Bott, M. H. P. & Holder, A. P., Crustal structure in the vicinity of South-west England 465
Briden, J. C., Gilbert Smith, A. & Sallomy, J. T., The geomagnetic field in Permo-Triassic time 101
Buchen, Peter W., Plane waves in linear viscoelastic media 531
Camfield, P. A., Porath, H. & Gough, D. I., Conductive structures in the North-western United States and South-west Canada 387
Cartwright, D. E. & Tayler, R. J., New computations of the tide-generating potential 45
Chatterjee, S. N., On the dispersion of Love waves and crust–mantle structure in the Gangetic Basin 129
Dahlen, F. A., Comments on paper by D. E. Smylie and L. Mansinha.. 355
Douglas, A., Hudson, J.A. & Kembhavi, V. K., The analysis of surface wave spectra using a reciprocity theorem for surface waves 207
Douglas, A., Hudson, J. A. & Kembhavi, V. K., The relative excitation of seismic surface and body waves by point sources 451
Dratler, J., Farrell, W. E., Block, B. & Gilbert, F., High-Q overtone modes of the Earth 399
Dyke, P. & Johns, B., On the determination of the structure of an off-shore tidal stream 287
Farrell, W. E., Dratler, J., Block, B. & Gilbert, F., High-Q overtone modes of the Earth 399
Ferraro, V. C. A., A note on the geomagnetic ring-current 251
Frank, F. C., On Lyttleton's extensions of Ramsey's theory of the nature of the core of the Earth 461
Fuchs, K. & Muller, G., Computation of synthetic seismograms with the reflectivity method and comparison with observations 417
Gilbert, Freeman, The diagonal sum rule and averaged eigenfrequencies 119
Gilbert, Freeman, Ranking and winnowing gross Earth data for inversion and resolution 125
Gilbert, Freeman, Dratler, J., Farrell, W. E. & Block, B., High-Q overtones modes of the Earth 399
Gilbert Smith, A., Briden, J. C. & Sallomy, J. T., The geomagnetic field in Permo-Triassic time 101
Gough, D. I., Porath, N. & Camfield, P. A., Conductive structures in the North-western United States and South-west Canada 387
Gupta, Jagdish, C. & Stening, Robert J., Amplitudes and periods of geomagnetic micro-pulsations in the $Pc3$, 4 range at Canadian Observatories 379
Hanks, Thomas C., The Kuril-Trench–Hokkaido Rise system: large shallow earthquakes and simple models of deformation 173
Holder, A. P. & Bott, M. H. P., Crustal structure in the vicinity of South-west England 465
Hudson, J. A., Douglas, A. & Kembhavi, V. K., The analysis of surface wave spectra using a reciprocity theorem for surface waves 207
Hudson, J. A., Douglas, A. & Kembhavi, V. K., The relative excitation of seismic surface and body waves by point sources 451
Inston, H. H., Marshall, P. D. & Blamey, C., Optimization of filter bandwidth in spectral analysis of wavetrains 243
Johns, B. & Dyke, P., On the determination of the structure of an off-shore tidal stream 287
Kembhavi, V. K., Douglas, A. & Hudson, J. A., The analysis of surface wave spectra using a reciprocity theorem for surface waves 207
Kembhavi, V. K., Douglas, A. & Hudson, J A., The relative excitation of seismic surface and body waves by point sources 451
Khan, Mohammad Abadullah, Some geophysical implications of the satellite-determined geogravity field 15
Khan, Mohammad Abadullah, Identifical frequency correlations of two irrotational force fields of a nearly spherical planet 411
Landisman, M. & Mueller, S., An example of the unified method of interpretation for crustal seismic data 365
Mansinha, L. & Smylie, D. E., The elasticity theory of dislocations in real Earth models and changes in the rotation of the Earth 329
Mansinha, L. & Smylie, D. E., Reply to comments on ' The elasticity theory of dislocations in real earth models and changes in the rotation of the Earth '.. .. 359
Marshall, P. D., Inston, H. H. & Blamey, C., Optimization of filter bandwidth in spectral analysis of wavetrains 243
Mather, R. S., A world geodetic system from gravimetry 75

PAGE

Matthews, D. H. & Smith, S. G., The sinking of Rockall Plateau 491
Molnar, Peter, P-wave spectra from underground nuclear explosions 273
Mueller, S. & Landisman, M., An example of the unified method of interpretation for crustal seismic data 365
Muller, G. & Fuchs, K., Computation of synthetic seismograms with the reflectivity method and comparison with observations 417
Muller, G., Approximate treatment of elastic body waves in media with spherical symmetry 435
Nairn, A. E. M. & Peterson, D. N., Palaeomagnetism of Permian redbeds from the South-western United States 191
O'Connell, Richard, J., Pleistocene glaciation and the viscosity of the lower mantle .. 299
Petersen, D. N. & Nairn, A. E. M., Palaeomagnetism of Permian redbeds from the South-western United States 191
Porath, H., Gough, D. I. & Camfield, P. A., Conductive structures in the North-western United States and South-west Canada 387
Rao, D. R. K. & Sastri, N. S., Separation of lunar daily geomagnetic variations into parts of oceanic and ionospheric origin in the Indian region 269
Richardson, A. & Watkins, N. D., Intrusives extrusives and linear magnetic anomalies 1
Sallomy, J. T., Briden, J. C. & Gilbert Smith, A., The geomagnetic field in Permo-Triassic time 101
Sastri, N. S. & Rao, D. R. K., Separation of lunar daily geomagnetic variations into parts of oceanic and ionospheric origin in the Indian region.. 269
Sen, Amiya, K., Propagation of extra low frequency waves in the magnetosphere .. 161
Shimshoni, Michael, The time of *SKS*, *SKP* and *PKS* and their depth allowances .. 139
Shimshoni, Michael, On Fisher's test of significance in harmonic analysis 373
Smets, E. & Sterling, A., Study of earth tides, earthquakes and terrestrial spectroscopy by analysis of the level fluctuations in a borehole at Heibaart (Belgium) .. 225
Smith, S. G. & Matthews, D. H., The sinking of Rockall Plateau 491
Smylie, D. E. & Mansinha, L., The elasticity theory of dislocations in real earth models and changes in the rotation of the Earth 329
Smylie, D. E. & Mansinha, L., Reply to comments on 'The elasticity theory of dislocations in real earth models and changes in the rotation of the Earth' 359
Snape, C., An example of anhysteretic moments being induced by alternating field demagnetization apparatus.. 361
Stening, Robert J. & Gupta, Jagdish, C., Amplitudes and periods of geomagetic micro-pulsations in the *Pc*3,4 range at Canadian Observatories 379
Sterling, A. & Smets, E., Study of earth tides, earthquakes and terrestrial spectroscopy by analysis of the level fluctuations in a borehole at Heibaart (Belgium) .. 225
Taylor, R. J. & Cartwright, D. E., New computations of the tide-generating potential 45
Valliant, H. D., A Canadian network of gravity measurements with pendulums .. 543
Watkins, N. D. & Richardson, A., Intrusives, extrusives and linear magnetic anomalies 1
Ziolokowski, Anton, Design of a marine seismic reflection profiling system using air guns as a sound source 499

SUBJECT INDEX

Book Reviews
Encyclopaedia of Astronomy 261
Cosmology—Theories of the Universe 261
Global Geophysics 261
Notes on Geomagnetic Observatory and Survey Practice 262
Methoden der Satellitengeodasie 263
History of the Earth's Magnetic Field 263
Textbook of Lithology 264
Understanding the Earth 265

Crustal structure
Conductive structures in the North-western United States and South-west Canada, *H. Porath, D. I. Gough & P. A. Camfield* 387
Crustal structure in the vicinity of South-west England, *A. P. Holder & M. H. P. Bott* 465
The sinking of Rockall Plateau, *D. H. Matthews & S. G. Smith* 491

Earth's Core
On Lyttleton's extensions of Ramsey's theory of the nature of the core of the Earth, *F. C. Frank* 461

Earth mantle
Pleistocene glaciation and the viscosity of the lower mantle, *Richard J. O'Connell* .. 299

PAGE

Geomagnetism

Intrusives, extrusives and linear magnetic anomalies, *N. D. Watkins & A. Richardson* 1
The geomagnetic field in Permo-Triassic time, *J. C. Briden, A. Gilbert Smith & J. T. Sallomy* 101
Separation of lunar daily geomagnetic variations into parts of oceanic and ionospheric origin in the Indian region, *N. S. Sastri & D. R. K. Rao* 269
Amplitudes and periods of geomagnetic micropulsations in the *Pc*3, 4 range at Canadian observatories, *Robert J. Stening & Jagdish C. Gupta* 379

Gravity

Some geophysical implications of the satellite-determined geogravity field, *Mohammad Abadullah Khan* 15
New computations of the tide-generating potential, *D. E. Cartwright & R. J. Taylor* 45
Propagation of extra low frequency waves in the magnetosphere, *Amiya S. Sen* .. 161
A Canadian network of gravity measurements with pendulums, *H. D. Valliant* .. 543

Mathematical treatments

The diagonal sum rule and averaged eigenfrequencies, *Freeman Gilbert* 119
Ranking and winnowing gross earth data for inversion and resolution, *Freeman Gilbert* 125
On Fisher's test of significance in harmonic analysis, *Michael Shimshoni* 379
Identical frequency correlations of two irrotational force fields of a nearly spherical planet, *Mohammad Abadullah Khan* 411

Oceanography

On the determination of the structure of an off-shore tidal stream, *B. Johns & P. Dyke* 287

Palaeomagnetism

Palaeomagnetism of Permian redbeds from the South-western United States, *D. N. Peterson & A. E. M. Nairn* 191
An example of anhysteretic moments being induced by alternating field demagnetization apparatus, *C. Snape* 361

Research notes

Optimization of filter bandwidth in spectral analysis of wavetrains, *H. H. Inston, P. D. Marshall & C. Blamey* 243
A note on the geomagnetic ring-current, *V. C. A. Ferraro* 251
A new magnitude formula for short period continental Rayleigh waves, *P. W. Basham* 255

Rotation of the Earth

The elasticity theory of dislocations in real earth models and changes in the rotation of the Earth, *D. E. Smylie & L. Mansinha* 329
Comments on paper by D. E. Smylie and L. Mansinha, *F. A. Dahlen* 355
Reply to comments on ' The elasticity theory of dislocations in real earth models and changes in the rotation of the Earth ', *D. E. Smylie & L. Mansinha* 359

Seismology

On the dispersion of Love waves and crust-mantle structure in the Gangetic Basin, *S. N. Chatterjee* 129
The times of *SKS*, *SKP* and *PKS* and their depth allowances, *Michael Shimshoni* .. 139
The Kuril Trench–Hokkaido Rise system: large shallow earthquakes and simple models of deformation, *Thomas C. Hanks* 173
The analysis of surface wave spectra using a reciprocity theorem for surface waves, *A. Douglas, J. A. Hudson & V. K. Kembhavi* 207
Study of earth tides, earthquakes and terrestrial spectroscopy by analysis of the level fluctuations in a borehole at Heibaart (Belgium), *A. Sterling & E. Smets* .. 225
P-wave spectra from underground nuclear explosions, *Peter Molnar* 273
An example of the unified method of interpretation for crustal seismic data, *S. Mueller & M. Landisman* 365
High-*Q* overtone modes of the Earth, *J. Dratler, W. E. Farrell, B. Block & F. Gilbert* 399
Computation of synthetic seismograms with the reflectivity method and comparison with observations, *K. Fuchs & G. Muller* 417
Approximate treatment of elastic body waves in media with spherical symmery, *G. Muller* 435
The relative excitation of seismic surface and body waves by point sources, *A. Douglas, J. A. Hudson & V. K, Kembhavi* 451
Design of a marine seismic reflection profiling system using air guns as a sound source, *Anton Ziolokowski* 499
Plane waves in linear viscoelastic media, *Peter W. Buchen* 531